



Main

Range of product	TeSys D
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-1 AC-4
Poles description	3P
Pole contact composition	3 NO
System Voltage	≤ 300 V DC power circuit ≤ 690 V AC 25...400 Hz power circuit
[Ie] rated operational current	80 A (≤ 140 °F (60 °C)) at ≤ 440 V AC AC-1 power circuit 65 A (≤ 140 °F (60 °C)) at ≤ 440 V AC AC-3 power circuit
Motor power kW	11 kW at 400 V AC 50/60 Hz AC-4 30 kW at 380...400 V AC 50/60 Hz AC-3 37 kW at 500 V AC 50/60 Hz AC-3 37 kW at 660...690 V AC 50/60 Hz AC-3 18.5 kW at 220...230 V AC 50/60 Hz AC-3
Motor power hp	40 hp at 460/480 V AC 50/60 Hz 3 phases motors 5 hp at 115 V AC 50/60 Hz 1 phase motors 10 hp at 230/240 V AC 50/60 Hz 1 phase motors 20 hp at 200/208 V AC 50/60 Hz 3 phases motors 20 hp at 230/240 V AC 50/60 Hz 3 phases motors 50 hp at 575/600 V AC 50/60 Hz 3 phases motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	80 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	1000 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 520 A <= 104 °F (40 °C) 10 s power circuit 900 A <= 104 °F (40 °C) 1 s power circuit 110 A <= 104 °F (40 °C) 10 min power circuit 260 A <= 104 °F (40 °C) 1 min power circuit
Associated fuse rating	125 A gG at <= 690 V coordination type 1 power circuit 125 A gG at <= 690 V coordination type 2 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A power circuit
[Ui] rated insulation voltage	600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	1.45 Mcycles 65 A AC-3 at Ue <= 440 V 1.4 Mcycles 80 A AC-1 at Ue <= 440 V
Power dissipation per pole	6.3 W AC-3 9.6 W AC-1
Protective cover	With
Mounting support	Rail Plate
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	CCC UL GOST CSA
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: flexible - with cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: solid - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: flexible - with cable end
Tightening torque	Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 70.8 lbf.in (8 N.m) - on EverLink BTR screw connectors - cable 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm ² hexagonal 4 mm
Operating time	12...26 ms closing 4...19 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1

B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1

Mechanical durability	6 Mcycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc drop-out at 140 °F (60 °C), AC 50/60 Hz 0.8...1.1 Uc operational at 140 °F (60 °C), AC 50 Hz 0.85...1.1 Uc operational at 140 °F (60 °C), AC 60 Hz
Inrush power in VA	140 VA at 68 °F (20 °C) (cos ϕ 0.75) 60 Hz 160 VA at 68 °F (20 °C) (cos ϕ 0.75) 50 Hz
Hold-in power consumption in VA	13 VA at 68 °F (20 °C) (cos ϕ 0.3) 60 Hz 15 VA at 68 °F (20 °C) (cos ϕ 0.3) 50 Hz
Heat dissipation	4...5 W at 50/60 Hz
Auxiliary contacts type	Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V signalling circuit
Non-overlap time	1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm signalling circuit
Power range	15...25 kW 200...240 V 3 phases 30...50 kW 380...440 V 3 phases 30...50 kW 480...500 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	24 V AC standard

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	23...140 °F (-5...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	4.8 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Product weight	1.9 lb(US) (0.86 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
GTIN	00785901565475
Nbr. of units in pkg.	1
Package weight(Lbs)	2.0800000000000001
Returnability	

Country of origin	ID
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Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0001 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Contractual warranty

Warranty period	18 months
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Dimensions



(1) Minimum electrical clearance

LC1		D40A...D65A
a		55
b1	with LA4 D•2	–
	with LA4 DB3 or LAD 4BB3	
	with LA4 DF, DT	157
	with LA4 DM, DW	161
c	without cover or add-on blocks	118
	with cover, without add-on blocks	
c1	with LAD N (1 contact)	–
	with LAD N or C (2, 3 or 4 contacts)	
c2	with LA6 DK10, LAD 6DK	163
c3	with LAD T, R, S	171
	with LAD T, R, S and sealing cover	

Wiring



Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power 30 kW and 415 VAC

Motor power (kW)	ICU (kA)	Breaker	Contactor (*)
30	50	 GV3P65	 LC1D65AB7

Non contractual pictures.

Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.